

REMARKS

The Office Action indicated that claims 2-6, 25-32, 60, 89-91, 107, 108, 134, 136 and 152-154 would be allowed if rewritten in independent form. Applicant appreciates the indication of allowed subject matter and request that the drafting of independent claims be held in abeyance until the Examiner considers the following comments.

The present invention is within a highly competitive market of manufacturing plasma display panels and gas discharge panels where an increase in production yield and a decrease in cost can represent significant advantages in this field. The present invention addresses the issues of cross talk between cells and noise problems that can occur during vibration of the finished panel.

The prior art has formed a sandwich structure of a first panel and a second panel by having the peripheries of the panel substrate sealed with a sealing member to create therein a discharged space. The present inventors recognize the difficulty of bonding or sealing the barrier ribs and first and second panels.

The present invention as represented by the subject matter of Claims 1 and 151 provides an improvement in further defining a sealing step in creating the panel structure by incorporating a pressure adjustment substep for adjusting the pressure so that the pressure inside the sealing unit is lower than the pressure outside the sealing unit thereby using a differential in atmospheric pressure or exterior pressure to force the front and back panels together so that both the panels and also the top of the barrier ribs within the panels can then be bonded together in an efficient and positive manner. The embodiment of Claim 151 includes Embodiment 12 of the present application as disclosed on page 52-56. As shown, for example, in Figures 20A-20D fastening tools such as the clips 42 are employed to pinch the respective first panel and second panel at an

area adjacent to a peripheral sealing layer and anti-deformation ribs 46. Accordingly, the panels are pinched by the fastening tools in an area in which barrier ribs are formed so that deformation does not occur, yet the panels can be pressed by the pressure of the fastening tools as the sealing material, placed between the panels, softens by an application of heat and then is set. Our Claim 151 specifically defines such a sealing step with a sealing material inserted between the first panel and the second panel on a rim and the surrounding unit which includes the first panel and the second panel is sealed while the respective first panel and second panel are pinched by the fastening tools in an area in which barrier ribs are formed.

Finally, as can be seen in Figures 21A-21F, different geometrical configurations of the anti-deformation ribs are possible.

The Office Action rejected Claim 1 and 151 as being completely anticipated under 35 U.S.C. § 102(b) over the European patent publication 945886A.

More specifically, the Office Action referred to a purported teaching associated with Embodiment 6 in the EP publication and described in Column 20, lines 2-24. Figure 6 discloses a semi-divided view of an upper panel and a lower panel utilizing a peripheral sealing material 9 made of a glass having a low melting-point to thereby form a discharging space therein. See Column 18, lines 39-45.

The cited teaching of the EP publication on Column 20, lines 2-24, is for purposes of teaching the use of the piping member 13 for purging air from the inner surface of the casing and filling it with a discharge gas. Actually, this teaching is opposite to the pressure adjustment substep of our Claim 1 wherein the adjusting pressure is lower than the pressure outside the surrounding unit. Column 20 is concerned with a gas filling step which is performed after the bonding step (which is somewhat equivalent to the sealing step of the present application). Our

present Claim 1 clearly defines that a pressure adjustment substep is applied during the sealing step.

As noted, on Column 20 there is a reliance upon the bonding members 15 of the frit glass on top of the barrier ribs for holding the upper panel substrate and lower panel substrate together so that there would be no gaps even when any pressure acting on the interior of the structure is higher than the pressure acting on the outer surface of the casing. See Column 20, lines 6-18.

Accordingly a person of ordinary skill in this field should find the teaching cited as anticipating the present independent Claim 1 and Claim 151 to only be concerned with the pressure inside and outside the casing during a discharge gas filling step after the bonding step or sealing step set forth in our present claims has been completed. This EP cited reference does not disclose nor suggest that during such a sealing step or bonding step the pressure inside the surrounding unit is purposefully adjusted to be lower than the pressure outside the surrounding unit. See, for example, Column 20, line 41 through Column 21, line 26 of the EP reference.

Accordingly, Applicants respectfully traverse this reference as an anticipation of our present invention as set forth in both Claims 1 and 151.

Claim 151 further defines the respective panels forming the surrounding unit to be pinched by fastening tools specifically during the sealing step with the sealing material inserted between the first and second panel and the sealing occurs while the fastening tools are pinching in an area where the barrier ribs are formed to thereby prevent deformation.

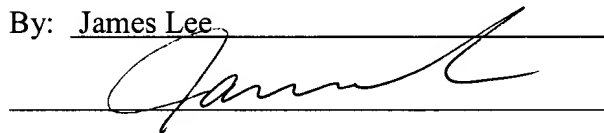
A careful review of each of the embodiments in the European patent publication fails to disclose or teach any such feature of a fastening tool in the manner as set forth in Claim 151. Thus, Claim 151 is even further removed from any possible anticipation by the cited reference.

In summary, an appreciation of the meaning of our sealing step and the manner in which it occurs with the sealing material between the first panel and the second panel adjacent the rim and a pressure adjustment substep for adjusting the pressure so that the pressure inside the sealing unit is lower than pressure outside the surrounding unit is significantly different than the teaching of the cited reference. Additionally, Claim 151 refers to a mechanical deformation with fastening tools that is neither suggested nor taught by any of the embodiments of the cited reference.

In view of the above comments, it is believed that the case is now in condition for allowance and an early notification of the same is requested. If the Examiner believes a telephone interview would help to further the prosecution of this case, he is respectfully requested to contact the undersigned attorney at the below listed number.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on January 7, 2004.

By: James Lee

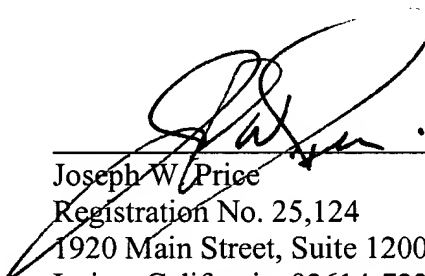


Signature

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Very truly yours,

SNELL & WILMER L.L.P.



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